

ABSTRACT OF THE DISCLOSURE

A technique is provided for imaging a field of view using an X-ray source comprising two or more emission points. Each emission point is configured to emit a fan of radiation encompassing less than the entire field of view. The emission points are activated individually and rotate about the field of view, allowing respective streams of radiation to be emitted at various view angles about the field of view. The emission points, which may correspond to different radial regions of the field of view, may be differentially activated to emphasize a region of interest within the field of view. The multiple emission points may be extrapolated along the longitudinal axis in duplicate or offset configurations.